Reissue Application No.:	)	Group Art Unit: 2161
09/512,592	)	_
United States Patent No.:	)	Examiner: Coby, F.
5,806,063	)	
Issued: September 8, 1998	)	
Applicant:	)	
Dickens-Soeder2000,LLC	)	•
Reexamination Proceeding:	)	
90/005,592	)	
Filed: December 21, 1999	)	
Reexamination Proceeding:	)	
90/005,628	)	
Filed: February 2, 2000		
Reexamination Proceeding:	)	
90/005,727	)	
Filed: May 16, 2000	)	
Reexamination Proceeding	)	
90/006,541	)	
Filed February 2, 2003	)	

## Applicant's Appeal Brief Appendix A Claims on Appeal

1. (Original) A method of processing symbolic representations of dates stored in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein according to a format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator, and  $Y_1$   $Y_2$  is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time;

selecting a 10-decade window with a  $Y_A Y_B$  value for the first decade of the window,  $Y_A Y_B$  being no later than the earliest  $Y_1 Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and

reformatting the symbolic representation of the date with the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ ,  $M_1$   $M_2$ , and  $D_1$   $D_2$  to facilitate further processing of the dates.

- 2. (Original) The method of claim 1, wherein the 10-decade window includes the decade beginning in the year 2000.
- 3. (Original) The method of claim 2, wherein the step of determining includes the step of determining the first value as 20 and the second value as 19.
- 4. (Original) The method of claim 1, including an additional step, after the step of reformatting, of

sorting the symbolic representations of dates.

- 5. (Original) The method of claim 1, wherein the step of reformatting includes the step of reformatting each symbolic representation of a date into the format C<sub>1</sub> C<sub>2</sub>, Y<sub>1</sub> Y<sub>2</sub>, M<sub>1</sub> M<sub>2</sub>, and D<sub>1</sub> D<sub>2</sub>.
- 6. (Original) The method of claim 5, including an additional step, after the step of reformatting, of

sorting the symbolic representations of dates using a numerical-order sort.

7. (Original) The method of claim 1, wherein the step of providing a database includes the step of

converting pre-existing date information having a different format into the format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator and  $Y_1$   $Y_2$  is the numerical year designator.

- 8. (Original) The method of claim 1, wherein the step of selecting includes the step of selecting Y<sub>A</sub> Y<sub>B</sub> such that Y<sub>B</sub> is 0 (zero).
- 9. (Original) The method of claim 1, including an additional step, after the step of reformatting, of

storing the symbolic representation of dates and their associated information back into the database.

10. (Original) The method of claim 9, including the additional step, after the step of reformatting, of

manipulating information in the database <u>utilizing</u> [having] the reformatted date information [therein].

11. A method of processing dates in a database, comprising the steps of providing a database with dates stored therein according to a format wherein M<sub>1</sub> M<sub>2</sub> is the numerical month designator, D<sub>1</sub> D<sub>2</sub> is the numerical day designator, and Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator, all of dates falling within a 10-decade period of time which includes the decade beginning in the year 2000;

selecting a 10-decade window with a  $Y_A$   $Y_B$  value for the first decade of the window,  $Y_A$   $Y_B$  being no later than the earliest  $C_1$   $C_2$   $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting each date in the form  $C_1$   $C_2$   $Y_1$   $Y_2$   $M_1$   $M_2$   $D_1$   $D_2$  to facilitate further processing of the dates; and

sorting the dates in the form  $C_1$   $C_2$   $Y_1$   $Y_2$   $M_1$   $M_2$   $D_1$   $D_2$ .

- 12. The method of claim 11, wherein the step of providing a database includes the step of converting pre-existing date information having a different format into the format wherein M<sub>1</sub> M<sub>2</sub> is the numerical month designator, D<sub>1</sub> D<sub>2</sub> is the numerical day designator and Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator.
- 13. The method of claim 11, wherein the step of selecting includes the step of selecting Y<sub>A</sub> Y<sub>B</sub> such that Y<sub>B</sub> is 0 (zero).
- 14. The method of claim 11, including an additional step, after the step of sorting, of

storing the sorted dates and their associated information back into the database.

- 15. The method of claim 14, including the additional step, after the step of sorting, of manipulating information in the database having the reformatted date therein.
- 16. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

providing a database with symbolic representations of dates stored therein according to a format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator, and  $Y_1$   $Y_2$  is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time;

selecting a window with a Y<sub>A</sub> Y<sub>B</sub> value for a pivot date of the window, Y<sub>A</sub> Y<sub>B</sub> being no later than the earliest Y<sub>1</sub> Y<sub>2</sub> year designator in the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and

reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$ ,  $Y_2$ ,  $M_1$ ,  $M_2$ , and  $D_1$ ,  $D_2$ , in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

17. (New) The method of claim 16, wherein the window includes at least a portion of the decade beginning in the year 2000.

- 18. (New) The method of claim 17, wherein the step of determining includes the step of:

  determining the first value as 20 and the second value as 19.
- 19. (New) The method of claim 16, including an additional step, after the step of reformatting, of:

sorting the symbolic representations of dates.

- 20. (New) The method of claim 16, wherein the step of reformatting includes the step of:

  reformatting each symbolic representation of a date into the format C<sub>1</sub> C<sub>2</sub> Y<sub>1</sub> Y<sub>2</sub> M<sub>1</sub>

  M<sub>2</sub> D<sub>1</sub> D<sub>2</sub> separately from the symbolic representations in the database.
- 21. (New) The method of claim 20, including an additional step, after the step of reformatting, of:

sorting the symbolic representations of dates using a numerical-order sort.

22. (New) The method of claim 16, wherein the step of providing a database includes the step of:

converting pre-existing date information having a different format into the format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator and  $Y_1$   $Y_2$  is the numerical year designator.

- 23. (New) The method of claim 16, wherein the step of selecting includes the step of:

  selecting Y<sub>A</sub> Y<sub>B</sub> such that Y<sub>B</sub> is 0 (zero).
- 24. (New) The method of claim 16, including an additional step, after the step of reformatting, of:

storing the symbolic representation of dates and their associated information back into the database.

25. (New) The method of claim 24, including the additional step, after the step of reformatting, of:

manipulating information in the database having the reformatted date information therein.

26. (New) A method of processing dates in a database, comprising the steps of:
providing a database with dates stored therein according to a format wherein M<sub>1</sub> M<sub>2</sub> is
the numerical month designator, D<sub>1</sub> D<sub>2</sub> is the numerical day designator, and Y<sub>1</sub> Y<sub>2</sub> is
the numerical year designator, all of the symbolic representations of dates falling
within a 10-decade period of time;

selecting a window with a  $Y_A$   $Y_B$  value for a pivot date of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values C<sub>1</sub> C<sub>2</sub>, Y<sub>1</sub> Y<sub>2</sub>, M<sub>1</sub> M<sub>2</sub>, and D<sub>1</sub> D<sub>2</sub>, in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates; and

sorting the dates in the form C<sub>1</sub> C<sub>2</sub> Y<sub>1</sub> Y<sub>2</sub> M<sub>1</sub> M<sub>2</sub> D<sub>1</sub> D<sub>2</sub>.

27. (New) The method of claim 26, wherein the step of providing a database includes the step of:

converting pre-existing date information having a different format into the format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator and  $Y_1$   $Y_2$  is the numerical year designator.

- 28. (New) The method of claim 26, wherein the step of selecting includes the step of:

  selecting Y<sub>A</sub> Y<sub>B</sub> such that Y<sub>B</sub> is 0 (zero).
- 29. (New) The method of claim 26, including an additional step, after the step of sorting, of:

storing the sorted dates and their associated information back into the database.

30. (New) The method of claim 29, including the additional step, after the step of sorting, of:

manipulating information in the database having the reformatted dates therein.

31. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

providing a database with symbolic representations of dates stored therein according to a format wherein  $Y_1$   $Y_2$  is the numerical year designator;

selecting a window with a  $Y_A$   $Y_B$  value for the first decade of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ , in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

32. (New) A method of processing dates in a database, comprising the steps of:

providing a database with symbolic representations of dates stored therein according to a format wherein  $Y_1$   $Y_2$  is the numerical year designator;

selecting a window with a  $Y_A$   $Y_B$  value for a pivot year of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting the symbolic representation of each of the dates in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$ ,  $C_2$ ,  $Y_1$ ,  $Y_2$ , in order to facilitate collectively further processing the reformatted symbolic representations of each of the dates; and

sorting the dates in the form C<sub>1</sub> C<sub>2</sub> Y<sub>1</sub> Y<sub>2</sub>.

33. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

providing a database with symbolic representations of dates stored therein according to a format wherein  $Y_1$   $Y_2$  is the numerical year designator; selecting a window with a  $Y_A$   $Y_B$  value for the first decade of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database; determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and reformatting the symbolic representation of each symbolic representation of a date in the database, without changing any of the symbolic representations of a date in the database during the reformatting step, with the reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ , in order to facilitate

34. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

dates.

collectively further processing the reformatted symbolic representations of each of the

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a

pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for purposes of such windowing and converting; and, running a program collectively on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date field of the database. (New) A method of claim 34 further comprising the step of: 35. opening the database prior to the step of converting. 36. (New) The method of claim 34 further comprising the step of: collectively sorting the converted symbolic representations prior to the step of running the program on the converted symbolic representations. (New) The method of claim 35 further comprising the step of: 37. collectively sorting the converted symbolic representations prior to the step of running the program on the converted symbolic representations. (New) The method of claim 34 further comprising the step of: 38. collectively manipulating the converted symbolic representations prior to the step

of running the program on the converted symbolic representations.

39.

(New) The method of claim 35 further comprising the step of:

collectively manipulating the converted symbolic representations prior to the step of running the program on the converted symbolic representations.

- 40. (New) The method of claim 34 further comprising the step of:

  collectively sorting the converted symbolic representations according to a

  different data field contained in the database from the at least one date field, prior to the step of running the program on the converted symbolic representations.
- 41. (New) The method of claim 35 further comprising the step of:

  collectively sorting the converted symbolic representations according to a

  different data field contained in the database from the at least one date field, prior to the step of running the program on the converted symbolic representations.
- 42. (New) The method of claim 34 further comprising the step of:

  collectively manipulating the converted symbolic representations according to a

  different data field contained in the database from the at least one date field, prior to the

  step of running the program on the converted symbolic representations.
- 43. (New) The method of claim 35 further comprising the step of:

  collectively manipulating the converted symbolic representations according to a

  different data entry field contained in the database from the at least one date field, prior to
  the step of running the program on the converted symbolic representations.

- 44. (New) The method of claim 34 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.
- 45. (New) The method of claim 35 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.
- 46. (New) The method of claim 34 wherein the step of converting includes converting at least a substantial portion of each of the plurality of symbolic representations of dates in the at least one date field and repeating this step until each of the date data entries in the at least one date field is converted into the format that does not have the ambiguity.
- 47. (New) The method of claim 35 wherein the step of converting includes converting at least a substantial portion of each of the plurality of symbolic representations of dates in the at least one date field and repeating this step until each of the date data entries in the at least one date field is converted into the format that does not have the ambiguity.
- 48. (New) The method of claim 46 further comprising the steps of:

  collectively sorting the converted symbolic representations prior to the step of running the program on the converted symbolic representations.
- 49. (New) The method of claim 47 further comprising the steps of:

collectively sorting the converted symbolic representations prior to the step of running the program on the converted symbolic representations.

- 50. (New) The method of claim 46 further comprising the step of:

  collectively manipulating the converted symbolic representations.
- 51. (New) The method of claim 49 further comprising the step of:

  collectively manipulating the converted symbolic representations.
- 52. (New) The method of claim 46 further comprising the step of:

  collectively sorting the converted symbolic representations according to a

  different data field in the database than the at least one date field, prior to the step of running the program.
- 53. (New) The method of claim 47 further comprising the step of:

  collectively sorting the converted symbolic representations according to a

  different data field in the database than the at least one date field, prior to the step of running the program.
- 54. (New, Previously Amended) The method of claim 52 further comprising the step

  of:

  collectively manipulating the converted symbolic representations.

- 55. (New) The method of claim 53 further comprising the step of:

  collectively manipulating the converted symbolic representations.
- 56. (New) The method of claim 52 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.
- 57. (New) The method of claim 53 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.
- 58. (New) The method of claim 54 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.
- 59. (New) The method of claim 55 wherein the program performs an operation which manipulates the data in a data field associated with the at least one date field of the database according to the converted symbolic representation of the date.
- 60. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

running a program on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations, separately from the date data symbolic representations of dates contained in the at least one date field of the database.

61. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic

representations of dates in the at least date field of the database for purposes of such windowing and converting;

running a program collectively on each of the converted symbolic representations of each of the respective dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

62. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for purposes of such windowing and converting:

storing the converted symbolic representations separate from the at least one date field of the database; and

running a program on the stored converted symbolic representations to sort or otherwise manipulate data in the database according to the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

63. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without the addition of any new data field to the database for purposes of such windowing and converting;

storing the converted symbolic representations separate from the at least one date field of the database; and

running a program collectively on the stored converted symbolic representations to
sort or otherwise manipulate the dates represented by the converted symbolic
representations, separately from the symbolic representations of dates contained in
the at least one date field of the database.

64. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

storing the converted symbolic representations separate from the at least one date field in the database; and

running a program on the stored converted symbolic representations to sort or

otherwise manipulate data in the database according to the dates represented by the

converted symbolic representations, separately from the symbolic representations of

dates contained in the at least one date field of the database.

65. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of:

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year represented by one of the symbolic representations of the dates as stored in

the at least one date field of the database, without modifying any of the symbolic representations of dates in the at least one date field of the database for purposes of such windowing and converting;

storing the converted symbolic representations separate from the at least one date field in the database; and

running a program collectively on the stored converted symbolic representations to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the symbolic representations of dates contained in the at least one date field of the database.

## 66. (New) A method of processing dates in a database, comprising the steps of:

providing a database with dates stored in at least one date field therein according to a format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator, and  $Y_1$   $Y_2$  is the numerical year designator;

selecting a window with a  $Y_A$   $Y_B$  value for a pivot date of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting the symbolic representation of each symbolic representation of a date in a portion of the at least one date field in the database, without the addition of any new

data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$ ,  $C_2$ ,  $Y_1$ ,  $Y_2$ ,  $M_1$ ,  $M_2$ , and  $D_1$ ,  $D_2$ ; and repeating the step of reformatting until each symbolic representation of a date in the at least one date field has been reformatted in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

67. (New) A method of processing dates in a database, comprising the steps of:

providing a database with dates stored in at least one date field therein according to a

format wherein Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator;

selecting a window with a Y<sub>A</sub> Y<sub>B</sub> value for a pivot date of the window, Y<sub>A</sub> Y<sub>B</sub> being no later than the earliest Y<sub>1</sub> Y<sub>2</sub> year designator in the database;

determining a century designator  $C_1$   $C_2$  for each date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting the symbolic representation of each symbolic representation of a date in a portion of the at least one date field in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ ; and

repeating the step of reformatting until each symbolic representation of a date in the at least one date field has been reformatted in order to facilitate collectively further processing the reformatted symbolic representations of each of the symbolic representations of each of the dates.

68. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of:

providing a database with symbolic representations of dates stored in at least one date field therein according to a format wherein Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator; selecting a window with a Y<sub>A</sub> Y<sub>B</sub> value for the first decade of the window, Y<sub>A</sub> Y<sub>B</sub> being no later than the earliest Y<sub>1</sub> Y<sub>2</sub> year designator in the at least one date field of the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and reformatting the symbolic representation of each symbolic representation of a date in at least one date field in the database, without the addition of any new data field to the

database, with the reformatted symbolic representation of each date in the database having the values C<sub>1</sub> C<sub>2</sub>, Y<sub>1</sub> Y<sub>2</sub>, in order to facilitate further processing of the reformatted symbolic representations of each of the symbolic representations of each of the dates, by running a program on the reformatted symbolic representations of each of the dates.

69. (New) A method of processing dates in a database, comprising the steps of:

providing a database with dates stored in at least one date field therein according to a

format wherein Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator;

selecting a window with a Y<sub>A</sub> Y<sub>B</sub> value for a pivot year of the window, Y<sub>A</sub> Y<sub>B</sub> being

no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each date in the at least one date field of the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting the symbolic representation of each symbolic representation of a date in the at least one date field in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ ;

sorting the reformatted symbolic representations of the dates in the form  $C_1$   $C_2$   $Y_1$   $Y_2$ ; and

running a program on the reformatted symbolic representations of each of the dates.

70. (New) A method for representing and utilizing dates stored in at least one date field of a database utilizing symbolic representations of the dates stored in at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year, with the pivot year being less than or equal to the earliest date represented by the symbolic representation of dates stored in the at least one date field, without the addition of any new data field to the database, and without modifying any of the symbolic representations of dates in the at least one date field, for purposes of such windowing and converting; and,

running a program on the converted symbolic representations of each of the dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date field of the database.

71. (New) A method for representing and utilizing dates stored in at least one date field of the database utilizing symbolic representations of the dates stored in the at least one date field of the database, which are in a format that creates ambiguity between dates in each of a pair of adjacent centuries, comprising the steps of

converting each of the symbolic representations of dates stored in the at least one date field of the database to a symbolic representation of each of the respective dates that does not create the ambiguity, by windowing the symbolic representations of each of the respective dates as stored in the at least one date field of the database against a pivot year, with the pivot year being less than or equal to the earliest date represented by a symbolic representation of dates stored in the at least one date field, and without the addition of any new data field to the database for purposes of such windowing and converting;

storing each of the converted symbolic representations of each of the dates separate from the database; and,

running a program on the stored converted symbolic representations of each of the converted symbolic representations of the dates to sort or otherwise manipulate the dates represented by the converted symbolic representations, separately from the date data symbolic representations contained in the at least one date field of the database.

72. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of

selecting a database with symbolic representations of dates stored therein according to a format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator, and  $Y_1$   $Y_2$  is the numerical year designator; selecting a 10-decade window with a  $Y_A$   $Y_B$  value for the first decade of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database; determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and, reformatting the symbolic representation of each symbolic representation of a date in the database with the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ ,  $M_1$   $M_2$ , and  $D_1$   $D_2$  prior to collectively further processing information contained within the database associated with the

73. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of

respective dates.

providing a database with symbolic representations of dates stored therein according to a format wherein  $Y_1$   $Y_2$  is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time; selecting a 10-decade window with a  $Y_A$   $Y_B$  value for the first decade of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and, reformatting the symbolic representation of the date with the values  $C_1$   $C_2$ ,  $Y_1$   $Y_2$ , to facilitate further processing of the dates.

74. (New) A method of processing dates in a database, comprising the steps of providing a database with symbolic representations of dates stored therein according to a format wherein Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator, all of symbolic representations of dates falling within a 10-decade period of time;

selecting a 10-decade window with a Y<sub>A</sub> Y<sub>B</sub> value for the first decade of the window, Y<sub>A</sub> Y<sub>B</sub> being no later than the earliest Y<sub>1</sub> Y<sub>2</sub> year designator in the database;

determining a century designator C<sub>1</sub> C<sub>2</sub> for each date in the database, C<sub>1</sub> C<sub>2</sub> having a first value if Y<sub>1</sub> Y<sub>2</sub> is less than Y<sub>A</sub> Y<sub>B</sub> and having a second value if Y<sub>1</sub> Y<sub>2</sub> is equal to or greater than Y<sub>A</sub> Y<sub>B</sub>:

reformatting each date in the form C<sub>1</sub> C<sub>2</sub> Y<sub>1</sub> Y<sub>2</sub> to facilitate further processing of the dates; and,

sorting the dates in the form C<sub>1</sub> C<sub>2</sub> Y<sub>1</sub> Y<sub>2</sub>.

75. (New) A method of processing symbolic representations of dates stored in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein according to a format wherein  $M_1$   $M_2$  is the numerical month designator,  $D_1$   $D_2$  is the numerical day designator, and  $Y_1$   $Y_2$  is the numerical year designator;

selecting a window with a  $Y_A$   $Y_B$  value for a pivot date of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each symbolic representation of a date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ; and

reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$ ,  $Y_2$ ,  $M_1$ ,  $M_2$ , and  $D_1$ ,  $D_2$ , in order to facilitate further processing of the reformatted symbolic representations of each of the symbolic representations of each of the dates.

76. (New) A method of processing dates in a database, comprising the steps of providing a database with dates stored therein according to a format wherein M<sub>1</sub> M<sub>2</sub> is the numerical month designator, D<sub>1</sub> D<sub>2</sub> is the numerical day designator, and Y<sub>1</sub> Y<sub>2</sub> is the numerical year designator;

selecting a window with a  $Y_A$   $Y_B$  value for a pivot date of the window,  $Y_A$   $Y_B$  being no later than the earliest  $Y_1$   $Y_2$  year designator in the database;

determining a century designator  $C_1$   $C_2$  for each date in the database,  $C_1$   $C_2$  having a first value if  $Y_1$   $Y_2$  is less than  $Y_A$   $Y_B$  and having a second value if  $Y_1$   $Y_2$  is equal to or greater than  $Y_A$   $Y_B$ ;

reformatting the symbolic representation of each symbolic representation of a date in the database, without the addition of any new data field to the database, with the

reformatted symbolic representation of each date in the database having the values  $C_1$   $C_2$ ,  $Y_1$ ,  $Y_2$ ,  $M_1$ ,  $M_2$ , and  $D_1$ ,  $D_2$ , in order to facilitate further processing of the reformatted symbolic representations of each of the symbolic representations of each of the dates; and

sorting the dates in the form  $C_1$   $C_2$   $Y_1$   $Y_2$   $M_1$   $M_2$   $D_1$   $D_2$ .